Climbing the Leaderboard

An arcade game player wants to climb to the top of the leaderboard and track their ranking. The game uses Dense Ranking, so its leaderboard works like this:

- The player with the highest score is ranked number 1 on the leaderboard.

- Players who have equal scores receive the same ranking number, and the next player(s) receive the immediately following ranking number.

Example

$ranked = [100, 90, 90, 80]$
$player = [70, 80, 105]$

The ranked players will have ranks 1, 2, 2, and 3, respectively. If the player's scores are 70, 80 and 105, their rankings after each game are 4th, 3rd and 1st. Return $[4, 3, 1]$.

Function Description

Complete the *climbingLeaderboard* function in the editor below.

climbingLeaderboard has the following parameter(s):

- *int ranked[n]*: the leaderboard scores

- *int player[m]*: the player's scores

Returns

- *int[m]:* the player's rank after each new score

Input Format

The first line contains an integer n, the number of players on the leaderboard.
The next line contains n space-separated integers $ranked[i]$, the leaderboard scores in decreasing order.
The next line contains an integer, m, the number games the player plays.
The last line contains m space-separated integers $player[j]$, the game scores.

Constraints

- $1 \leq n \leq 2 \times 10^5$

- $1 \leq m \leq 2 \times 10^5$

- $0 \leq ranked[i] \leq 10^9$ for $0 \leq i < n$

- $0 \leq player[j] \leq 10^9$ for $0 \leq j < m$

- The existing leaderboard, $ranked$, is in *descending* order.

- The player's scores, *player*, are in *ascending* order.

Subtask

For **60%** of the maximum score:

- $1 \leq n \leq 200$
- $1 \leq m \leq 200$

Sample Input 0

```
7
100 100 50 40 40 20 10
4
5 25 50 120
```

Sample Output 0

```
6
4
2
1
```

Explanation 0

Alice starts playing with **7** players already on the leaderboard, which looks like this:

Rank	Name	Score
1	Emma	100
1	David	100
2	Caroline	50
3	Ritika	40
3	Tom	40
4	Heraldo	20
5	Riley	10

After Alice finishes game **0**, her score is **5** and her ranking is **6**:

Rank	Name	Score
1	Emma	100
1	David	100
2	Caroline	50
3	Ritika	40
3	Tom	40
4	Heraldo	20
5	Riley	10
6	**Alice**	**5**

After Alice finishes game **1**, her score is **25** and her ranking is **4**:

Rank	Name	Score
1	Emma	100
1	David	100
2	Caroline	50
3	Ritika	40
3	Tom	40
4	**Alice**	**25**
5	Heraldo	20
6	Riley	10

After Alice finishes game **2**, her score is **50** and her ranking is tied with Caroline at **2**:

Rank	Name	Score
1	Emma	100
1	David	100
2	Caroline	50
2	**Alice**	**50**
3	Ritika	40
3	Tom	40
4	Heraldo	20
5	Riley	10

After Alice finishes game **3**, her score is **120** and her ranking is **1**:

Rank	Name	Score
1	**Alice**	**120**
2	Emma	100
2	David	100
3	Caroline	50
4	Ritika	40
4	Tom	40
5	Heraldo	20
6	Riley	10

Sample Input 1

```
6
100 90 90 80 75 60
5
50 65 77 90 102
```

Sample Output 1

```
6
5
4
```

```
2
1
```